Page 2 of 6

Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application:

Claim Listing:

1-25. (Cancelled)

- 26. (Previously Presented) A method for generating an immune response in a patient, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside.
- 27. (Original) The method according to claim 26, wherein the oligonucleotide analog immunostimulatory compound is administered in combination with an antibiotic, antigen, allergen, vaccine, antibody, cytotoxic agent, antisense oligonucleotide, gene therapy vector, DNA vaccine, adjuvant, or combination thereof.
- 28. (Original) The method according to claim 26, wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 29. (Original) The method according to claim 28, wherein such conjugation is to the 3'-end of the oligonucleotide compound.
- 30. (Previously Presented) A method for therapeutically treating a patient having disease caused by a pathogen, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside.
- 31. (Original) The method according to claim 30, wherein the pathogen is a virus.
- 32. (Original) The method according to claim 30, wherein the pathogen is a parasite.
- 33. (Original) The method according to claim 30, wherein the pathogen is a bacterium.
- 34. (Previously Presented) A method for treating a cancer patient, such method comprising administering to the patient an immunostimulatory oligonucleotide compound,

Page 3 of 6

comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside.

- 35. (Original) The method according to claim 34, wherein the immunostimulatory oligonucleotide compound is administered in combination with a chemotherapeutic compound.
- 36. (Previously Presented) A method for treating an autoimmune disorder, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside.
- 37. (Original) The method according to claim 36, wherein the autoimmune disorder is autoimmune asthma.
- 38. (Previously Presented) A method for treating airway inflammation or allergy, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside.
- 39. (New) A method for generating an immune response in a patient, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a natural or non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside, and wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 40. (New) The method according to claim 39, wherein such conjugation is to the 3'-end of the oligonucleotide compound.
- 41. (New) The method according to claim 39, wherein the oligonucleotide analog immunostimulatory compound is administered in combination with an antibiotic,

Page 4 of 6

allergen, antibody, cytotoxic agent, antisense oligonucleotide, gene therapy vector, DNA vaccine, adjuvant, or combination thereof.

- 42. (New) A method for therapeutically treating a patient having disease caused by a pathogen, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a natural or non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside, and wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 43. (New) The method according to claim 42, wherein such conjugation is to the 3'-end of the oligonucleotide compound.
- 44. (New) The method according to claim 42, wherein the pathogen is a virus.
- 45. (New) The method according to claim 42, wherein the pathogen is a parasite.
- 46. (New) The method according to claim 42, wherein the pathogen is a bacterium.
- 47. (New) A method for treating a cancer patient, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an 'immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a natural or non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside, and wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 48. (New) The method according to claim 47, wherein such conjugation is to the 3'-end of the oligonucleotide compound.
- 49. (New) The method according to claim 47, wherein the immunostimulatory oligonucleotide compound is administered in combination with a chemotherapeutic compound.
- 50. (New) A method for treating an autoimmune disorder, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a natural or non-natural pyrimidine nucleoside and purine is a

Page 5 of 6

natural or non-natural purine nucleoside, , and wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.

- 51. (New) The method according to claim 51, wherein such conjugation is to the 3'-end of the oligonucleotide compound.
- 52. (New) The method according to claim 50, wherein the autoimmune disorder is autoimmune asthma.
- 53. (New) A method for treating airway inflammation or allergy, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine is a natural or non-natural pyrimidine nucleoside and purine is a natural or non-natural purine nucleoside, and wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 54. (New) The method according to claim 53, wherein such conjugation is to the 3'-end of the oligonucleotide compound.